

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

Request for Proposals (RFP) 15-004P

**MAINLINE WEIGH IN MOTION EQUIPMENT INSTALLATION
AND INTEGRATION WITH MAINLINE
AND RAMP SCREENING SYSTEMS**

Proposals must be submitted
No later than **1:00 p.m. CDT**
May 13, 2015

**No submissions or modifications
will be accepted after this deadline.**

To constitute a valid submission, proposal must:

- (1) Be submitted by the prescribed date and time (Section 2.4);
- (2) Address all of the requirements set forth herein;
- (3) Contain Page 17, completed with the following information:
 - a) Company name, address, and phone number.
 - b) Original signature in ink, not photocopied or stamped.

For further information regarding this RFP contact
Danny Keene, Division Head
AHTD Equipment and Procurement Division
at 501-569-2672 or by e-mail at Danny.Keene@arkansashighways.com

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Arkansas State Highway and Transportation Department
RFP-15-004P – Mainline Weigh in Motion Equipment Installation and Integration with
Mainline and Ramp Screening Systems

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REQUEST FOR PROPOSAL 15-004P
MAINLINE WEIGH IN MOTION EQUIPMENT INSTALLATION
AND INTEGRATION WITH MAINLINE
AND RAMP SCREENING SYSTEMS

SECTION 1. INTRODUCTION

- 1.1. Request for Proposal:** This Request for Proposal (RFP) is issued by the Arkansas State Highway and Transportation Department hereinafter called “AHTD”, to a qualified firm (Vendor) to install mainline Weigh in Motion (WIM) Equipment at Arkansas weigh station locations. A Closed Circuit Television (CCTV) with snapshot capabilities shall be installed near each WIM location and images collated with weight data. A vehicle tracking subsystem shall also be installed capable of tracking vehicles and providing sequence information for vehicles entering the ramp. The Vendor shall also provide an open interface and integration services for the integration of WIM data into mainline screening programs and ramp screening systems at weigh stations.

Mainline WIM equipment installation and integration services will be provided to AHTD in two phases. Phase I shall include mainline WIM, vehicle tracking and CCTV camera installation at two West Memphis locations: Bridgeport and Riverside. Phase I shall also include integration with mainline and ramp screening systems at the two locations. Phase II shall include optional system installation and integration at additional sites in Arkansas as selected by AHTD.

- 1.2. Point of Contact:** This Request for Proposals (RFP) is issued by the AHTD, Equipment and Procurement Division on behalf of the Arkansas Highway Police (AHP) which are the points of contact for the Department during the submission and selection process. These two Divisions will administer any contract resulting from this RFP. Questions concerning this RFP should be addressed to the AHTD officials named below:

Questions concerning submission of a proposal in response to this RFP should be addressed to:

Danny Keene, Division Head
Equipment and Procurement Division
Arkansas State Highway and Transportation Department
P. O. Box 2261
Little Rock, AR 72203
Phone: 501-569-2672
Fax: 501-569-2679

Questions concerning technical content and requirements of this RFP should be addressed to:

Chief Ronnie Burks
Arkansas Highway Police
P. O. Box 2779
Little Rock, AR 72203-2779
Phone: 501-569-2421
Fax: 501-569-4999

Written inquires are encouraged and will be responded to in writing. Oral communications shall not be binding on the Department and can in no way modify the terms, conditions, or specifications of the RFP or relieve the successful Vendor of any obligations resulting from this RFP. Proposers are expected to raise any questions they have concerning the RFP document at this point in the RFP process. In the event that it becomes necessary to provide additional clarifying data or information, or to revise any part of this RFP, revisions, amendments, or supplements will be provided to all recipients of this initial RFP and all who have requested information in writing.

- 1.3. **Proper Qualifications:** Proposers must demonstrate their ability to execute any contracting resulting from their proposal by providing proof of two (2) successful implementations of mainline WIMs and a minimum of one (1) installation where WIM data has been integrated with 3rd party mainline screening system vendor(s).
- 1.4. **Information Restrictions:** All information received by AHTD regarding this RFP is restrictive and will not be available before award is made to the successful firm.
- 1.5. **Choice of Law and Choice of Forum:** This RFP and any resulting contract shall be governed by and construed in accordance with the laws of the State of Arkansas. Any proceeding relating to any cause of action of any nature arising from or related to the RFP or contract may be brought only before the appropriate forum in Pulaski County, Arkansas.
- 1.6. **Ethics:** *“It shall be a breach of ethical standards for a person to be retained, or to retain a person, to solicit or secure a State contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies maintained by the contractor for the purpose of securing business.”* Ark. Code Ann. §19-11-708(a).

SECTION 2. PREPARING AND SUBMITTING PROPOSAL

- 2.1. **General Instructions:** The evaluation and selection of a Vendor will be based on the information submitted in the proposal and references. Failure to respond to each of the requirements in the RFP may be the basis for rejecting a response. In every case, AHTD will be the sole judge as to whether a proposal has or has not

met requirements set forth herein. Further, AHTD will not entertain questions as to how it determined the particular needs expressed in this document.

- 2.1.1. A Cover Letter is required and should display a clear understanding of the project, include a positive commitment to complete the work in the proposed time-period, and briefly summarize why the firm should be selected. Address and contact information for each party in a proposed joint venture should be included.
- 2.1.2 Qualifications: Proposer submittals must include a statement of qualifications documenting the relevant qualifications of the firm or firms, as well as information summarizing the relevant qualifications of the personnel involved.

Qualifications, Experience and Competence of Firm(s): Information must be included summarizing and documenting the qualifications, experience and competence of the firm or firms in relation to the contractual services anticipated. A discussion of the firm's experience should be included.

Open Interface Certification: Proposers shall certify, in writing, that all WIM, vehicle tracking and CCTV data applicable for commercial vehicle screening purposes and system reporting, and all communications equipment and related software shall together compose an open interface that may be accessed, with no restrictions, by the State or State authorized 3rd parties. The Open Interface Certification shall be signed by an authorized representative of the firm.

References: The Proposers shall submit references for at least two (2) successful installations of mainline WIM equipment and one (1) successful integration with 3rd party mainline or ramp screening programs. Proposers with experience interfacing with the ramp screening and mainline screening systems used in Arkansas should specifically state this experience as part of their qualifications and provide references. All references shall include a point of contact name, address, and telephone number, and a brief description of the work completed by the Proposer. Information obtained from reference contacts may be used in the selection process.

EEO/Civil Rights: A firm's reputation including its responsiveness to EEO and Civil Rights will be a factor in the selection.

- a. Personnel Qualifications and Availability: Proposers must identify and summarize the relevant experience of key personnel that would actually provide the anticipated services, including system installation and integration services. Key personnel listed must include the Project Manager and Technical Lead for the Proposer and the Project Manager and Technical Lead for each subcontractor listed in the proposal. The

Lead System Integrator, Quality Assurance Lead, and System Testing Lead must also be identified and a summary of relevant experience provided. Projects listed in the proposal that are intended to show the firm's experience in the type of work contemplated and that do not have the involvement of any team member may not be considered by AHTD as relevant.

2.1.3 DBE Considerations: Discussion of DBE status or participation should be provided in order to receive special consideration.

2.2. Proposal Format and Contents: Proposers shall prepare the proposal clearly and concisely, addressing all appropriate points of this RFP. Proposers shall number proposal pages consecutively and address all requirements in the order presented in this RFP.

Proposals shall be typed and submitted on 8.5 by 11 inch paper and bound securely. One original and four (4) copies of the proposal shall be submitted. One electronic copy shall also be provided to AHTD. Proposals shall include 3 packets as outlined below, including:

Packet 1 - Technical Proposal
Packet 2 - Price Proposal
Packet 3 – Vendor Statements

All references to *cost* should be restricted to PACKET 2 – Price Proposal. Price proposals shall be provided in a separate, sealed envelope, labeled with Proposer name and “Price Proposal: Mainline WIM Equipment Installation and Integration with Mainline and Ramp Screening Systems”. These costs will not be opened until the top ranked firms have been determined.

Any descriptions or discussions of functionality, software or services not requested by the state in this RFP should be restricted to PACKET 1, Section 6 Additional Information.

2.2.1 PACKET 1 – Technical Proposal:

At a minimum, Packet 1 – Technical Proposal should include the following:

1. Cover Letter
2. Signature Page
3. Section 1 Corporate Background, Qualifications and Project Staffing
4. Section 2 Response to State Requirements
5. Section 3 Work Plan and Project Schedule
6. Section 4 Project Management Plan
7. Section 5 Products and Services Itemized List and System Specifications
8. Section 6 Additional Information

- 2.2.1.1 Cover Letter: The cover letter described in Section 2.1.1 shall be included in Packet 1 – Technical Proposal.
- 2.2.1.2 Signature Page: The completed Signature Page found on Page 17 of this RFP. At least one of the proposal copies must include a Signature Page with an original signature, as described in Section 2.6.
- 2.2.1.3 Section 1 - Corporate Background, Qualifications and Project Staffing: This section will provide information on background and qualifications of the Proposer and any subcontractors, and information necessary to comply with all requirements listed in Sections 2.1.2 and 2.1.3.
- 2.2.1.4 Section 2 - Response to State Requirements: The Proposer will describe how the proposed solution will satisfy the state's requirements as defined in ATTACHMENT A: SCOPE OF WORK. The format and content of this section shall comply with the instructions given in ATTACHMENT A: SCOPE OF WORK.

No cost information should be provided in this section. Cost information should *only* be contained in PACKET 2.

- 2.2.1.5 Section 3 – Work Plan and Project Schedule: The Proposer shall develop a detailed Work Plan and Project Schedule for Phase I activities that represents the proposed approach to this project. The work description and project schedule shall describe major activities and deliverables associated with each activity, expected duration of each activity, and duration of overall project from notice to proceed through final acceptance testing and project close-out. The work plan shall clearly identify AHTD roles and responsibilities and their general timing.

Project activities should, at a minimum address and incorporate the key milestones and activities listed in Exhibit 2-1. Proposers are free to call out additional key milestones / activities, and can frame and sequence activities according to the Proposer's preferred project approach. Each project activity should be associated with a deliverable. AHTD's preferred schedule would include Phase I project closeout prior to July 31, 2016.

AHTD prefers that design and requirements activities for Bridgeport and Riverside installations be performed concurrently. However, the remainder of the installation and testing activity schedule should be separable, should AHTD elect for completion of the Bridgeport installation, prior to the completion of the Riverside installation.

Exhibit 2-1. Phase I Project Deliverables. Include each of the phases listed below for the Bridgeport installation and again for the Riverside installations.

Ref#	Project Activities	Deliverable
A.	Functional and Technical Requirements Specification – to include site requirements, 3 rd party screening system siting requirements, interface requirements, and user requirements.	Requirements Document
B.	Design – to include identification of preferred equipment location, installation layout, interface specifications, and coordination with 3 rd party screening system vendors.	Site Diagrams, Interface Control Document(s) and other design documentation
C.	System development/modification, Factory Testing and Pre-installation Testing. Interface testing with 3 rd party screening system vendors to the extent practicable.	Test Scripts and Test Results
D.	Equipment installation, calibration and site testing of equipment	Site Test Plan, installed equipment, results of site testing.
E	Integration testing of WIM, vehicle tracking system, and CCTV images with mainline and ramp screening systems – to include coordination with 3 rd party screening system vendors, modification of WIM, vehicle tracking system and CCTV interfaces, if needed, to accommodate 3 rd party vendor needs.	Modifications to ICDs, as needed, minutes of 3 rd party coordination meetings, results of interface testing.
F	Full System Testing	System Test Plan and results.
G	User Training	Training Sessions and Training Materials
H	Acceptance Testing and Go-live	Test Scripts and Test Support, Modifications to System required due to Acceptance Testing Results, Go-live Support.
I	Development Project Closeout	Final Project Documentation

2.2.1.6 Section 4 - Project Management Plan: The Proposer’s approach to project management and the project’s special considerations should be described. This section must include:

A. Methods of project status reporting – the selected Vendor will be required to produce written monthly project status reports

and hold semi-monthly teleconferences to discuss project status, needs, next steps.

- B. Interface Development, including Interface Control Documents for interfaces with external databases.
- C. Test Plan: The Proposer shall describe the test plan for the system. Reference may be made to Proposer's responses to the test requirements listed in Exhibit A.4.11, if the Proposer chooses. Tests plans should include, at a minimum, the following:
 - a. Factory testing;
 - b. Pre-installation unit testing of all software and hardware, integration testing of system interfaces with 3rd party screening systems and system test of all components to the extent practicable;
 - c. On-site, post installation testing;
 - d. System calibration, tuning and configuration;
 - e. Integration testing with mainline and ramp screening systems;
 - f. Acceptance Testing.
- D. Quality control program
- E. Sign off procedures for completion of deliverables and major activities, including acceptance testing and training.
- F. Problem identification, recording and resolution
- G. Assumptions and constraints in developing the management and work plans.
- H. Procedures for handling future change orders.

2.2.1.7 Section 5 - Products and Post-installation Services Itemized List and System Specifications: This section shall contain an itemized list of all equipment, hardware, software, software licenses, and communications equipment to be provided by the Proposer to AHTD. It shall also contain an itemized list of all post-installation services to be provided such as help/maintenance center, periodic WIM calibration, etc. All system components and services shall comply with AHTD requirements as described in ATTACHMENT A: SCOPE OF WORK.

This Section shall also include:

- A. Sample licenses and warrantee information on system components;
- B. Sample maintenance contract(s) that cover all system components. (Note: AHTD prefers one maintenance contract with the selected Vendor that covers all system components rather than multiple maintenance contracts, each covering a portion of the system.) The sample maintenance contract(s) should comply with all maintenance requirements listed in Section A.4.9 of this RFP, specifically Requirements 9.1

- through 9.6. If the sample maintenance contract does not comply with the requirements listed in this RFP, the Proposer shall note the non-compliant term(s) and provide justification;
- C. A description of problem reporting and resolution procedures;
 - D. System controller(s)/server(s)/communication(s) specifications including communication protocols, communication and processing speed and data storage capacity and anticipated throughput;
 - E. Back-up equipment and processes, if applicable;

If it is expected that AHTD personnel perform any maintenance activities on the system, these expected activities should also be listed in this section.

2.2.1.8 Section 6 - Additional Information: The Proposer may provide any additional information not required by the previous proposal sections that will clarify or enhance information provided. This information should be concise and germane to the proposed project. Descriptions or discussions of any functionality, software or services not requested by the state in this RFP should be restricted to this section and clearly identified as potential optional services / future enhancement opportunities.

2.2.2 PACKET 2 – Price Proposal: At a minimum, Packet 2 should include the following sections:

- Section 1 – Cost Specifications
- Section 2 – Certifications

2.2.2.1 Section 1 - Cost Specifications: The Proposer will submit prices for all goods and services necessary for completing the Scope of Work as defined in ATTACHMENT A: SCOPE OF WORK. The Proposer should not use "To Be Determined", add time and material caveats, or stipulate that any software, hardware, goods, or services required for the project will be acquired by the Department.

The price proposal shall be structured by the categories shown in Exhibit 2-2. Each of items 1-8 (and sub-items, for example 1.1, 1.2, etc.) should be priced as separate and distinct line items. The Proposer may choose to itemize costs at a more detailed level than that specified in Exhibit 2-2; however, the price proposal should be capable of rolling up to the line items specified and each cost item should be associated with a deliverable. Costs associated with Project Management shall be included within each individual line item. Other Direct Costs (ODCs) and travel, should be included in each relevant 1-8 price proposal line item.

In Item 5 of the price proposal, the Vendor shall include any optional integration being offered in response to requirements listed in A.4.12. If functionality is being offered beyond that listed in the requirement, the additional functionality shall be priced separately. Prior to executing a contract with the selected Vendor, AHTD will determine the optional integration functions to include in the final contract.

In Items 6 and 7 of the price proposal, the Vendor must provide hardware and software maintenance costs for a three-year period to be billed in three equal installments with the following options:

- a) Hardware and software maintenance costs for a fourth year,
- b) Hardware and software maintenance costs for a fifth year.

Year 1 of the annual maintenance shall include support for a five (5) month AHTD operational test and project evaluation. Additional support required may include additional unanticipated reports and additional information. AHTD operation test and project evaluation support shall not exceed 40 hours (divided between the Bridgeport and Riverside installations).

AHTD expects that the Riverside and Bridgeport requirements and design activities (see Item#1 in Exhibit 2-2) will be performed concurrently. For installation and testing activities, AHTD's preference is that Bridgeport and Riverside installations/testing also be completed concurrently. However, depending on cost proposals submitted in response to this RFP, AHTD may elect to have the Bridgeport installation completed prior to the Riverside installation. Proposers should provide costs in Items 3.1 through 3.7 based on concurrent implementation. Additional costs that would be incurred if the Riverside installation is subsequent to the Bridgeport installation should be included in Item 3.8.

Exhibit 2-2. Cost Response Format

Reference Number	Category Description	Deliverable	Labor Hours	Labor Cost	Other Direct Costs (1)	Total Costs
1 – Requirement and Design for Riverside and Bridgeport (<i>Instructions to Proposers: exclude costs associated with implementation of requirements listed in A.4.12. Requirements and Design costs for A.4.12 should be included in Item 5.</i>)						
1.1	Functional and Technical Specifications	Requirements Document	xx	\$xx	\$xx	\$xx
1.2	Design	Site Diagrams, Interface Control Documents, other design documentation	xx	\$xx	\$xx	\$xx
2 – Bridgeport Installation (<i>Instructions to Proposers: include all capabilities offered for Bridgeport with the exception of any capabilities being offered in response to requirements in A.4.12</i>)						
2.1	License Fee	Bridgeport Installation and System Warrantees	--	--	\$xx	\$xx
2.2	Development/Modification of System, Factory and Pre-installation Testing, Interface Testing	Test Scripts and Test Results	xx	\$xx	\$xx	\$xx
2.3	Equipment Installation, Calibration and Site Testing	Site Test Scripts and Test Results, Installed Equipment	xx	\$xx	\$xx	\$xx
2.4	Integration Testing	ICD Modifications, Meeting Minutes, Test Plan and Results	xx	\$xx	\$xx	\$xx
2.5	Full System Testing	System Test Plan and Results	xx	\$xx	\$xx	\$xx
2.6	User Training	Training Sessions and Training Materials	xx	\$xx	\$xx	\$xx
2.7	Acceptance Testing and Go-live	Test Scripts and Test Support, Modifications to System, Go-live Support	xx	\$xx	\$xx	\$xx
3 – Riverside Installation (<i>Instructions to Proposers: include only those costs that are in addition to the costs listed in Item 2. Also do not include costs for any capabilities being offered in response to A.4.12</i>)						
3.1	License Fee	Riverside Installation and System Warrantees	--	--	\$xx	\$xx
3.2	Development/Modification of System, Factory and Pre-installation Testing, Interface Testing	Test Scripts and Test Results	xx	\$xx	\$xx	\$xx
3.3	Equipment Installation, Calibration and Site Testing	Site Test Scripts and Test Results, Installed Equipment	xx	\$xx	\$xx	\$xx
3.4	Integration Testing	ICD Modifications, Meeting Minutes, Test Plan and Results	xx	\$xx	\$xx	\$xx
3.5	Full System Testing	System Test Plan and Results	xx	\$xx	\$xx	\$xx
3.6	User Training	Training Sessions and Training Materials	xx	\$xx	\$xx	\$xx
3.7	Acceptance Testing and Go-live	Test Scripts and Test Support, Modifications to	xx	\$xx	\$xx	\$xx

Reference Number	Category Description	Deliverable	Labor Hours	Labor Cost	Other Direct Costs (1)	Total Costs
		System, Go-live Support				
3.8	Additional costs if the Riverside installation is subsequent to Bridgeport installation.		xx	\$xx	\$xx	\$xx
4 – Project Closeout						
4.1	Project Closeout	Final Project Documentation	xx	\$xx	\$xx	\$xx
5 – Optional Integrations listed in A.4.12 (<i>Instructions to Proposers: lists costs of optional integrations offered for both Riverside and Bridgeport</i>)						
5.1 Optional Integration Requirement 12.1						
5.1.1	Functionality as specified in 12.1	Delivered and tested functionality as described	xx	\$xx	\$xx	\$xx
5.1.2	Additional Functionality Offered	Delivered and tested functionality as described	xx	\$xx	\$xx	\$xx
5.2 Optional Integration Requirement 12.2						
5.2.1	Functionality as specified in 12.2	Delivered and tested functionality as described	xx	\$xx	\$xx	\$xx
5.2.2	Additional Functionality Offered	Delivered and tested functionality as described	xx	\$xx	\$xx	\$xx
5.3 Optional Integration Requirement 12.3						
5.3.1	Functionality as specified in 12.3	Delivered and tested functionality as described	xx	\$xx	\$xx	\$xx
5.3.2	Additional Functionality Offered	Delivered and tested functionality as described	xx	\$xx	\$xx	\$xx
5.4 Optional Integration Requirement 12.4						
5.4.1	Functionality as specified in 12.4	Delivered and tested functionality as described	xx	\$xx	\$xx	\$xx
5.4.2	Additional Functionality Offered	Delivered and tested functionality as described	xx	\$xx	\$xx	\$xx
6 – Bridgeport Annual Maintenance (<i>Instructions to Proposers: do not include maintenance costs associated with optional integrations listed in Item 5</i>)						
6.1	Year 1 Maintenance	Maintenance agreement and specified support, including project evaluation support and additional ad-hoc reports.	--	--	\$xx	\$xx
6.2	Year 2-3 Maintenance	Maintenance agreement and specified support	--	--	\$xx	\$xx
6.3	Year 4 Maintenance	Maintenance agreement and specified support	--	--	\$xx	\$xx
6.4	Year 5 Maintenance	Maintenance agreement and specified support	--	--	\$xx	\$xx
7 – Riverside Annual Maintenance (<i>Instructions to Proposers: lists only those costs that are in addition to costs listed in Item 6. Also exclude costs for optional integration maintenance.</i>)						
7.1	Year 1 Maintenance	Maintenance agreement and specified support, including project evaluation support and additional ad-hoc reports.	--	--	\$xx	\$xx
7.2	Year 2-3 Maintenance	Maintenance agreement and specified support	--	--	\$xx	\$xx
7.3	Year 4 Maintenance	Maintenance agreement and specified support	--	--	\$xx	\$xx
7.4	Year 5 Maintenance	Maintenance agreement and specified support	--	--	\$xx	\$xx

8 – Optional Integration Annual Maintenance (<i>Instructions to Proposers: include only those costs associated with maintaining functionality as described in Item 5</i>)						
8.1	Year 1 Maintenance	Maintenance agreement and specified support	--	--	\$xx	\$xx
8.2	Year 2-3 Maintenance	Maintenance agreement and specified support	--	--	\$xx	\$xx
8.3	Year 4 Maintenance	Maintenance agreement and specified support	--	--	\$xx	\$xx
8.4	Year 5 Maintenance	Maintenance agreement and specified support	--	--	\$xx	\$xx
Totals						
A	Requirements and Design (Total for Item 1)		xx	\$xx	\$xx	\$xx
B	Bridgeport Installation (Total for Item 2)		xx	\$xx	\$xx	\$xx
C	Riverside Installation (Total for Item 3, excluding 3.8)		xx	\$xx	\$xx	\$xx
D	Project Closeout (Total for Item 4)		xx	\$xx	\$xx	\$xx
E	Optional Integrations (Total for Item 5)		xx	\$xx	\$xx	\$xx
F	Total Base Installation (A+B+C+D)		xx	\$xx	\$xx	\$xx
G	Total Bridgeport and Riverside Maintenance (Year 1)		--	--	\$xx	\$xx
H	Total Bridgeport and Riverside Maintenance (Years 2-3)		--	--	\$xx	\$xx

(1) ODCs should include all costs which are not labor, i.e., travel, equipment, etc.

2.2.2.2 Section 2 – Certification:

The Proposer must certify, in writing, that all response terms, including prices, will remain in effect for a minimum of 185 days after the response due date and continue through the term of the contract. The certification shall be signed by an authorized representative for the firm.

2.2.3 PACKET 3 – Vendor Statements: This packet should include the following:

- A reference to all RFP amendments received by the Vendor (by amendment issue date) to warrant that the Vendor is aware of all such amendments, if any. If no RFP amendments have been issued, the Vendor should so state;
- A statement that the Vendor believes the proposed solution meets all the mandatory requirements set forth in the RFP document and its amendments, if any;
- A statement that the Vendor acknowledges and agrees to all of the rights of the Department, including the RFP rules and procedures, terms and conditions and all other rights and terms specified in this RFP, including any amendments.

2.3. **Incurring Costs:** The AHTD is not liable for any costs incurred by the Proposers in replying to the RFP. The cost of developing and submitting the proposal is entirely the responsibility of the Proposer. This includes costs to determine the nature of this engagement, preparation of proposal, submission of proposal, and all other costs associated with responding to this RFP.

2.4. **Time and Place for Submission of Proposal:** Proposers must submit one original and four (4) copies of the complete proposal and one (1) electronic copy, along with all materials required herein for acceptance of their proposal, prior to 1:00 p.m. (CDT) on May 13, 2015. The RFP number should be clearly marked on all packaging containing the proposal.

Mailing Address:

Equipment and Procurement Division
Division
Arkansas State Highway
and Transportation Department
P. O. Box 2261
Little Rock, AR 72203

Physical Address:

Equipment and Procurement
Division
Arkansas State Highway
and Transportation Department
11302 W. Baseline Road
Little Rock, AR 72209

2.5. **Late Proposals:** Proposals received after the date and hour established will be considered late proposals and will be automatically disqualified. Late proposals will be returned unopened.

- 2.6. **Unsigned Proposals:** Page 17 of the RFP must be signed, completed and included with the proposal to constitute a valid submission. The signature must be legible, original (not stamped or photocopied) and in ink. Unsigned and improperly signed proposals will be automatically disqualified.
- 2.7. **Withdrawing or Modifying Proposals:** A proposal that has been submitted may be withdrawn, modified, or corrected by a Proposer prior to the date and time set for submission. Telegrams or letters received before the date set in Section 2.4 will be accepted and attached to the unopened proposal, and the proposal will be considered withdrawn, modified, or otherwise changed accordingly. RFP number should be clearly marked on all packaging/envelopes containing proposal documents. No proposal may be withdrawn, modified, corrected, or otherwise changed after the date and time set in Section 2.4.
- 2.8. **Assignment:** No contract resulting from this RFP may be assigned, sold, or transferred without the prior written consent of the AHTD, and no obligation incurred pursuant to this RFP and any resulting contract may be delegated without prior written consent of the AHTD.
- 2.9. **Cancellation of Contract:** The AHTD reserves the right to cancel any award or contract without recourse upon written notice to the Vendor.
- 2.10. **Default and Remedies:** Non-performance of any requirement or condition of any contract resulting from this RFP shall constitute default. Upon default, the AHTD shall issue a written notice of default providing a period in which the Consultant shall have seven (7) days to cure said default. If the Consultant remains in default beyond the seven (7) days, or if the default is repeated during the term of the contract or any extension thereof, the AHTD may, in its sole discretion, terminate the contract(s) or remaining portions thereof and exercise any remedy provided by law.
- 2.11. **Right of Rejections:** The AHTD reserves the right to award this contract to the firm that best meets the requirements of the RFP, and not necessarily to the lowest bidder. The AHTD reserves the right to reject any or all proposals prior to execution of the contract, with no penalty to the AHTD.

SECTION 3. DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION

- 3.1. **Disadvantaged Business Enterprise (DBE) Participation:** Although no DBE percentage goal is established for this project, the proposal shall include DBE participation to the extent practical.

SECTION 4. EVALUATION AND AWARD

- 4.1. **Evaluation:** In order to select the responsible and qualified firm whose proposal is most advantageous to the AHTD, the Proposers will be evaluated in a two-phase process.

In the first phase, a Vendor Selection Committee will use the following criteria to evaluate the proposals. Three firms deemed to be the most qualified and have the most responsive and responsible proposals will be selected for further consideration.

	Points
Phase 1 Evaluation Criteria	100
1. Qualifications, Experience and Competence of Firm(s)	30
2. Personnel Qualifications and Availability	20
3. Responsiveness to DBE opportunities	10
4. Project Proposal	40

At the State’s discretion, short-listed Vendors may be required to make oral presentations. Vendors will not be required to travel to Arkansas for the presentations, rather web conferencing may be used. The Department will make every reasonable attempt to schedule each presentation at a time that is agreeable to the Vendor. The Vendor will be responsible for setting up and managing the web conference at the time specified by the State. Failure of a Vendor to conduct a presentation on the date scheduled may result in rejection of the Vendor’s proposal.

In the second phase, the sealed envelopes containing the Proposed Cost for the top three firms will be opened. The Selection Committee will divide each firm’s proposed price by the total Phase I score to obtain an “adjusted price”. The firm selected should be the firm whose adjusted price is the lowest.

The AHTD reserves the right to award to the selected bidder, all or only a portion of the work proposed.

- 4.2. **Award:** Award will be made based upon the evaluation of all proposals received in response to this solicitation and the determination of the proposal or proposals considered to be the most advantageous to the AHTD. The AHTD reserves the right to accept or reject in whole or in part any and all proposals submitted, to award to more than one Proposer, and to waive any minor technicalities when it is in the best interest of the AHTD. If only one qualified respondent responds by the due date, AHTD may enter into contract negotiations with that firm.
- 4.3. **Basis of Payment:** Although the negotiated contract will be a lump sum contract, partial payments shall be made for project deliverables completed under the

contract and satisfactorily detailed in each invoice and accompanying progress report.

**REQUEST FOR PROPOSAL 15-004P
MAINLINE WEIGH IN MOTION EQUIPMENT INSTALLATION
AND INTEGRATION WITH MAINLINE
AND RAMP SCREENING SYSTEMS**

*******This page must be completed, properly signed and submitted for*****
proposal to be considered.**

SECTION 5. Signature Page

I, the undersigned, affirm that this proposal is made on behalf of the below-named company/individual, for whom I have legal authority to commit to the terms and conditions set forth in the RFP and this response, to which we agree to be bound if this proposal is found acceptable by the AHTD; and that this proposal is made without any collusion or coercion on the part of any person, firm, corporation or other entity.

Company: _____ Address: _____

Representative: _____ City: _____

Title: _____ Phone: _____ Fax: _____

Email: _____

Federal Tax ID or Social Security No.: _____

Signature: _____ Date: _____

(Must be legible, original, no photocopies, and in ink)

For AHTD Use Only

Accepted: _____

By: _____

Date: _____

**REQUEST FOR PROPOSAL 15-004P
MAINLINE WEIGH IN MOTION EQUIPMENT INSTALLATION
AND INTEGRATION WITH MAINLINE
AND RAMP SCREENING SYSTEMS**

ATTACHMENT A: SCOPE OF WORK

A.1 Overview

This Request for Proposal (RFP) is issued by the Arkansas State Highway and Transportation Department to a qualified firm (Vendor) to install mainline Weigh in Motion (WIM) Equipment at Arkansas weigh station locations. A Closed Circuit Television (CCTV) with snapshot capabilities shall be installed near each WIM location and images collated with weight data. A vehicle tracking subsystem shall also be installed capable of tracking vehicles and providing sequence information for vehicles entering the ramp. The Vendor shall also provide an open interface and integration services for the integration of WIM data into mainline screening programs and ramp screening systems at weigh stations.

Mainline WIM equipment installation and integration services will be provided to AHTD in two phases. Phase I shall include mainline WIM, vehicle tracking, and CCTV camera installation at two West Memphis locations: Bridgeport and Riverside. Phase I shall also include integration with mainline and ramp screening systems at the two locations. Phase II shall include optional system installation and integration at additional sites in Arkansas as selected by AHTD.

A.1.1 Background

Arkansas' eight interstate weigh stations are equipped with HELP Inc. PrePass electronic screening systems and four stations are equipped with Drivewyze installations. Currently, Arkansas requires PrePass and Drivewyze enrolled trucks which are running over the legal weight limit, even if permitted, to exit the mainline and enter the scale for static weight check and permit verification. However, mainline weigh in motion scales (WIM) have not been installed, so the state cannot verify the extent to which this requirement is being met.

Ramp WIM has been installed at each of Arkansas' interstate weigh stations to assist officers in screening vehicles entering weigh stations. Vehicles which register overweight on the ramp WIM scales are directed to the static scale lane for further weighing and credentials / safety verifications. Vehicles which register as weight compliant on the WIM are directed to another lane for credentials / safety verification only or bypass of the credentials / safety verification booth.

The West Memphis area, on the eastern side of the state, where Interstates 40 and 55 "intersect", exhibits the highest truck volumes in the state. The four weigh stations serving the West

Memphis area experience combined truck traffic volumes of over 14 million vehicles annually. These stations operate on a 24/7 basis.

Approximately 25 percent of the trucks passing the Bridgeport, Marion, Riverside and Lehi Stations (the four West Memphis area weigh stations) are PrePass or Drivewyze equipped. Pull-in statistics show that approximately 3.8 million vehicles a year are cleared for legal bypass by the PrePass and Drivewyze programs, indicating that the four ports experience combined annual throughput of approximately 11.2 million vehicles per year – an average of 5.3 trucks per minute per station.

The heavy ramp volumes and lack of mainline WIM present a variety of issues for the ports, including:

1. Potential for mainline back-up , requiring the ports to close intermittently to control queuing;
2. Frequent starting and stopping on the ramp interferes with the ramp WIM performance, resulting in inaccurate reads;
3. Inability to monitor the weight of transponder-equipped trucks.

The system to be delivered as a result of this RFP will provide:

- Mainline WIM to verify weight compliance of PrePass and Drivewyze equipped vehicles. PrePass and Drivewyze equipped vehicles registering overweight on the mainline WIM would be directed through the PrePass and Drivewyze driver notification interfaces to exit the mainline and enter the weigh station.
- Mainline CCTV camera. The truck image will be collated with the mainline WIM data and displayed at the weigh station officers' processing screen to assist the officers to tie the correct weight screening result with the vehicle being processed.
- Mainline and ramp loops and sensors as needed to determine if each vehicle exits into the weigh station or remains on the mainline. The tracking system shall provide sufficient and timely information to the ramp sorting system (developed by IRD, Inc.) to allow the ramp sorting system to match mainline weight data and mainline CCTV image with ramp weight data. The tracking system shall also provide data to the ramp sorting system to allow the ramp sorting system to display mainline weight and CCTV image for all vehicles that remain on the mainline.
- An open interface to mainline WIM, CCTV, and vehicle tracking data to allow for integration of mainline WIM data with all existing mainline and ramp screening systems and future installation of OCR based screening systems, or other screening systems.

Services delivered along with the system will include integration services to coordinate integration of weight, vehicle tracking (if requested) and CCTV data with PrePass and Drivewyze, and weight, CCTV, and tracking data with the existing ramp screening systems at Arkansas weigh stations.

Once the system is functioning successfully at the Bridgeport and Riverside Weigh Stations, AHTD may modify the contract to include installation of the system at other stations in Arkansas (Phase II).

Mainline WIM, CCTV, and mainline loops and sensors shall be installed for each inbound mainline lane at Riverside and Bridgeport. Riverside, on I-40, has three inbound lanes. Bridgeport, on I-55 has two inbound lanes. The roadway surface composition at both locations is concrete. Both weigh station locations are downstream of bridges spanning the Mississippi River.

- The Bridgeport weigh station is deemed to be sufficiently downstream of the bridge and elevated portion of the highway that equipment installation could be installed downstream of the elevated portion of the highway.
- For Riverside, equipment will need to be installed on the elevated portion of the highway. As the roadway shoulder is extremely narrow on the elevated portion of the highway, the WIM equipment cabinet would need to be installed on a support in such a manner as to not impede normal roadway traffic. AHTD understands that if access to the cabinet is required, one lane will need to be closed for the duration of cabinet access activities. The cabinet may not be located on the ground beneath the elevated portion of the highway due to risk of flooding. An image of one possible location for Riverside equipment installation is shown in Exhibit A-1.

Exhibit A-1. Possible location of Riverside WIM and CCTV equipment installation. The depicted location is approximately 2500 feet from weigh station.



A.2 System Components

To achieve the goals of AHTD, the delivered system must contain, at a minimum, the following components for each installation site:

1. A CCTV Camera for vehicle imaging in each inbound mainline lane.
2. Mainline WIM for each inbound mainline lane.
3. Mainline and ramp sensors and loops for vehicle tracking.
4. Other triggering devices (i.e. in-road vehicle detector loop), as needed, to detect vehicle presence and initiate camera operation and provide basis for the collation of WIM data with truck image.
5. An open interface to the WIM, CCTV camera, and vehicle tracking data for distribution of data to the State's existing mainline and ramp screening systems and future screening systems. The interface shall also provide data to the ramp screening system on vehicles entering the weigh station, including sequence of entrance, and shall also include information on vehicles that remain on the mainline. Information shall be delivered to all screening systems in a timely manner.
6. Communications, as needed, between all installed devices and existing screening systems.
7. The infrastructure for the installation, including possible mounting poles, electrical lines and conduit, communication lines and conduit, and any other infrastructure needed for the system to function properly.

The Vendor will be required to run communication lines from the weigh station to the mainline equipment installation site for both Riverside and Bridgeport installations. Vendors are expected to include the price of installing communication lines for both the Bridgeport and Riverside installations in their cost proposals. For both the Bridgeport and Riverside installation, the State prefers that communication lines be run in-ground and then brought to the point needed to support communications with the installed mainline equipment. Where in-ground communication lines are not deemed feasible, wireless communications may be used as an alternative, provided the wireless communications installed meet the requirements listed in this RFP.

Power is available along both I-55 and I-40 corridors, however the power is of insufficient quality to support sensitive electronics. Vendors should include the price of installing power lines at both weigh stations in their cost proposals. For both the Bridgeport and Riverside installation, power shall be run in-ground and then brought to the point needed to support the installed equipment.

Where support structures are determined to be suitable to support the weight and dimensions of the proposed installed equipment, the Vendor may use the support structures owned by the state for installation of cameras, illuminators, etc. The signage support structure near Riverside, shown in Exhibit A-1, is attached to the elevated portion of the highway and will support the installation of a WIM cabinet, provided the cabinet may be attached without modifying or

drilling into the structure, and provided the cabinet, including installed equipment, does not exceed 350 lbs. and does not exceed 67" high, 30" wide, or 30" deep. The overhead support may be used to support illuminators, cameras and antennas provided the overhead installed equipment does not exceed 225 lbs.

A.3 Weigh Station Layout and Operation

The Bridgeport and Riverside Weigh Stations are responsible for screening vehicles that are not transponder equipped and for screening vehicles pulled in by PrePass and Drivewyze. The vehicles are directed into the weigh station and enter in a single lane equipped with a ramp Weigh in Motion (WIM) device. Vehicles which register overweight or over height, would be directed, by the use of dynamic messaging signs, to one of the two static scale lanes for further weighing and credentials / safety verifications. Vehicles which register as weight and height compliant would be directed, by the use of dynamic messaging signs, to one of the two static scale lanes for further credentials / safety verification only or to bypass the static scale lanes and return to the main lanes of the Interstate.

Engineering drawings for the Bridgeport and Riverside weigh stations are shown in Exhibits A-2 and A-3.

Exhibit A-2. Bridgeport Weigh Station

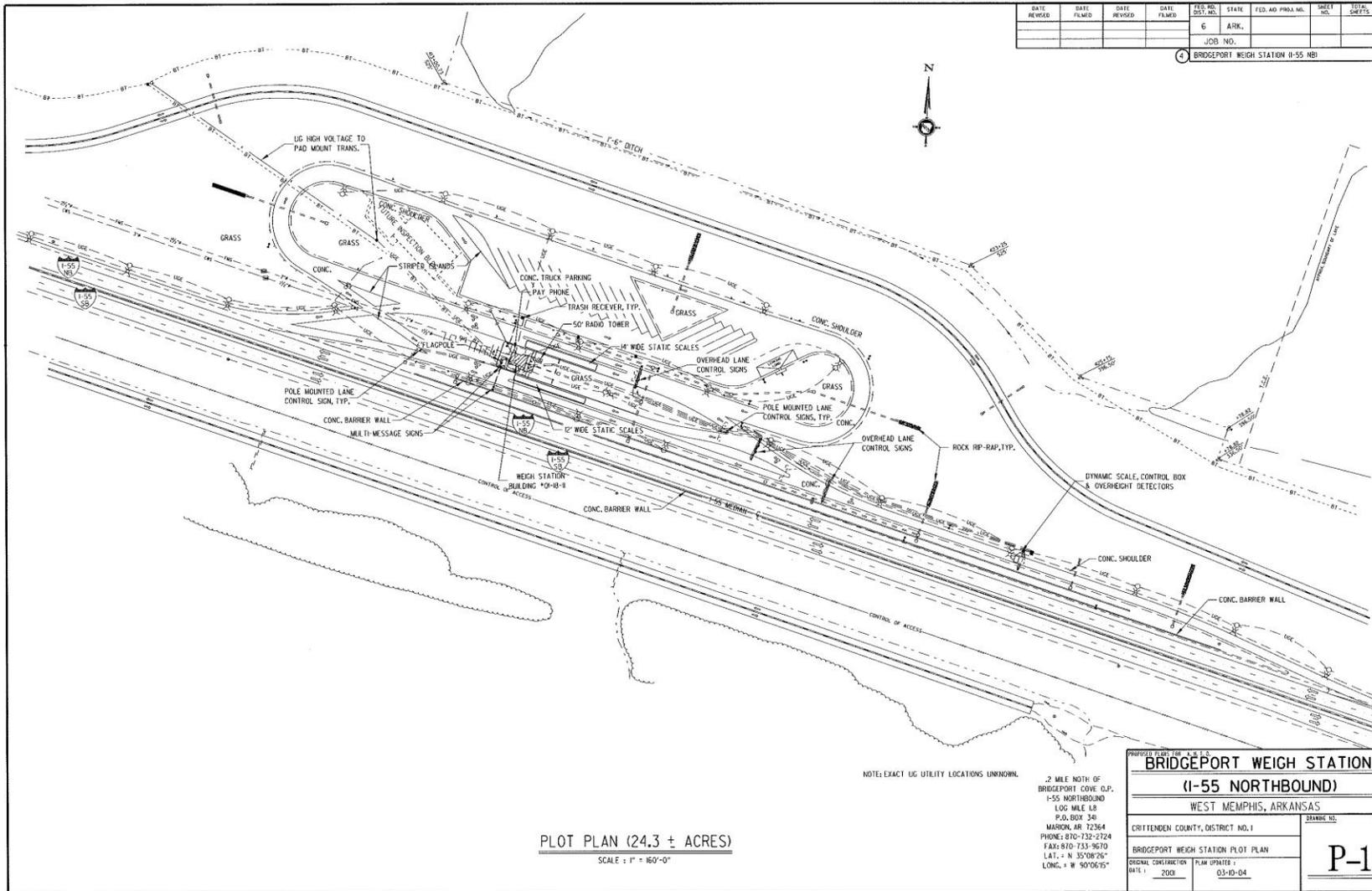
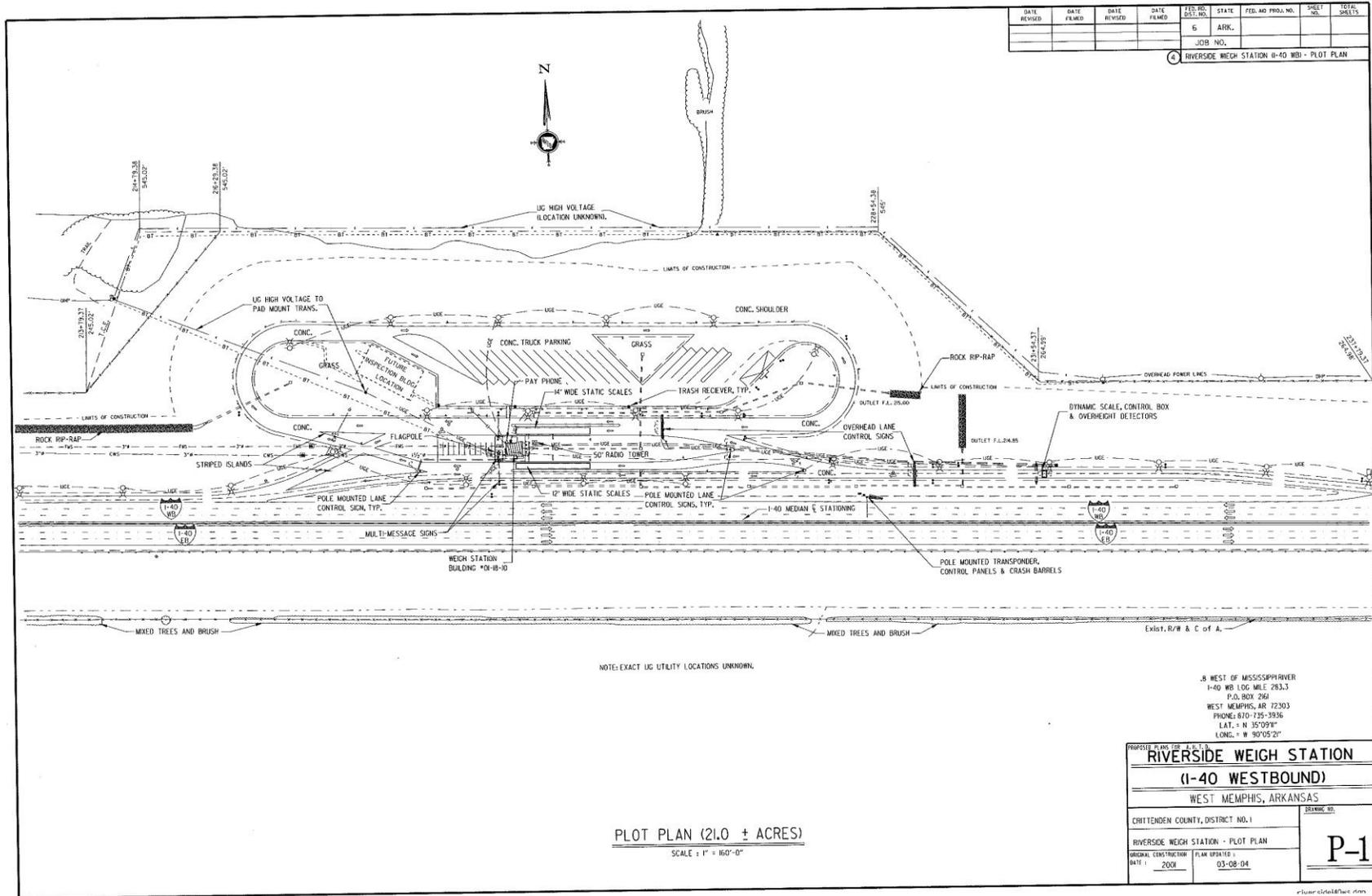


Exhibit A-3. Riverside Weigh Station



A.4 Requirements

Exhibits A.4.1 to A.4.12 provide details of the AHTD requirements for the system installation. Column 1 of the exhibits lists the requirements number, column 2 indicates ‘M’ for mandatory items and ‘O’ for optional items, and column 3 describes the requirement. Column 3 may also contain specific instructions for the Proposer’s response to the requirement, labeled as “Instructions to Proposer”.

Proposal Instructions: In *Section 2 Response to State Requirements* of proposals, Proposers must respond to each mandatory requirement included in Exhibits A.4.1 to A.4.12. Each requirement shall be referenced in the order and with the requirement number given in the Exhibits below. In addition, include responses to any specific instructions, labeled “Instructions to Proposer”, given in Column 3.

For optional requirements, the Proposer shall indicate if the proposed system will or will not meet the requirement and, if the system will meet the requirement, describe the functionality being offered.

For optional requirements listed in A.4.12, Proposers should comply with the instructions given within the section. Prior to executing a contract with the selected Vendor, AHTD will determine the optional integration functions, offered in response to A.4.12, to include in the final contract.

A.4.1 General Requirements

Exhibit A.4.1. General Requirements.

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
1.1	M	The system, at a minimum, shall include the components listed in Section A.2. It shall also include any additional components necessary to meet the requirements detailed in this RFP.
1.2	M	TECHNOLOGY ACCESS: The Vendor expressly acknowledges and agrees that state funds may not be expended in connection with the purchase of information technology unless that system meets the statutory requirements found in 36 C.F.R. § 1194.21, as it existed on January 1, 2013 (software applications and operating systems) and 36 C.F.R. § 1194.22, as it existed on January 1, 2013 (web-based intranet and internet information and applications), in accordance with the State of Arkansas technology policy standards relating to accessibility by persons with visual impairments.

A.4.2 Mainline Weigh-In-Motion (WIM) Requirements

Exhibit A.4.2. Mainline WIM Requirements.

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
2.1	M	<p>WIMs, and detectors, as needed to meet the requirements of this RFP, shall be installed in-ground and flush with the pavement surface for each inbound mainline lane at Bridgeport and Riverside weigh stations and at sufficient distance upstream from the weigh stations to allow PrePass and Drivewyze (see note below) to use the provided weight data in the bypass screening decision. Kistler quartz piezoelectric WIMs are preferred, but not required, for the Riverside installation.</p> <p>Note: Drivewyze standard WIM placement requirement is approximately 1 mile upstream from a weigh station. WIMs placed less than one mile upstream of the weigh station are configured as special cases by Drivewyze. A one mile advance for the WIM read may place the Riverside and Bridgeport WIMs on the bridges over the Mississippi, which is not preferred by Arkansas. When responding to this RFP, Proposer's may consider that WIM placement to accommodate Drivewyze will likely need to occur closer to both weigh stations than the Drivewyze standard 1 mile advance, and will require Drivewyze to accommodate these weigh stations as special cases.</p>
2.2	M	<p>In each mainline lane, WIM installation may include a single or dual device installation, along with loop detectors, as needed, to achieve the accuracy specified in this section.</p> <p>Instructions to Proposer: In response to this requirement, Proposer shall describe the type of WIMs to be installed and if single or dual devices will be installed. If dual devices are installed, Proposer shall describe how measurements will be combined to achieve a single result. Responses to accuracy requirements listed below shall be by lane.</p>
2.3	M	The WIMs shall assist with the classification of vehicles, distinguishing between passenger and commercial vehicles.
2.4	M	WIMs shall operate at vehicle speeds up to at least 80 mph.
2.5	M	The installed system shall have the capacity to weigh axles up to 60,000 lbs at vehicle speeds up to at least 80mph.
2.6	M	The WIM shall independently weigh each side of the vehicle to determine side-to-side load issues.

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
2.7	M	WIMs shall operate at a wide range of temperatures and relative humidity. Instructions to Proposer: In response to this requirement, Proposer shall list the temperature and relative humidity operating ranges of the proposed equipment.
2.8	M	Installed WIMs shall be durable and not damaged by routine roadway maintenance activities such as sweeping or snow removal.
2.9	M	WIMs shall include off-scale detection to sense any vehicles traveling all, or in part, off the weight measurement device. Off scale sensors shall be mounted flush with the pavement.
2.10	M	The WIMs shall automatically and accurately weigh, within the tolerances set forth herein, each axle of a multi axle vehicle, and calculate the gross weight of the vehicle by combining axle weights.
2.11	M	The WIMs shall verify the weight of each vehicle based upon the vehicle's class using Arkansas' vehicle classification and weight regulations.
2.12	M	In road WIM equipment shall be environmentally sealed and include integrated lightning strike protection.
2.13	M	WIMs shall be flush with the surface of the pavement.
2.14	M	WIM pit requirements: If required by the type of WIMs installed, the WIM installation pits shall contain gravity drains and screens to prevent the accumulation of moisture in the WIM pits. WIM pits shall be constructed in such a manner to meet performance, warranty and maintenance requirements as specified in this RFP. Instructions to Proposer: In response to this requirement, Proposers shall specify depth of WIM pits required, construction requirements, and if gravity drains are not required for the type of WIMs installed, provide justification.
2.15	M	The system shall comply with current ASTM 1318 Type III standards.
2.16	M	The installed system shall provide an accuracy of length measurement (distance between axles) of ± 0.5 feet.
2.17	M	The installed system shall provide a single axle weight accuracy of $\pm 15\%$ and axle group weight accuracy of $\pm 10\%$. WIM weight accuracy shall be tested against the weigh station static scale.
2.18	M	The system shall provide a speed measurement accuracy of ± 2 mph.
2.19	M	The accuracy of GVW measurement shall be within $\pm 6\%$.

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
2.20	M	The level of confidence of the WIM calibration shall follow the ASTM recommendation to be within $\pm 5\%$ at the 95% level of confidence.
2.21	M	The rate of misclassifications shall not exceed 5%.
2.22	M	The percent of commercial vehicle passages not detected shall not exceed 5%. All detected commercial vehicle traffic data shall be reported to each system requesting the information.
2.23	M	A comprehensive sensor calibration shall be conducted by the selected Vendor after installation and before acceptance testing. This calibration shall include at least ten (10) passes by a certified weight truck passing over the sensor ten (10) miles below the speed limit and at the posted speed limit for the lane under consideration. The results of these tests, along with the associated truck images for each pass, shall be provided to AHTD as a part of acceptance testing. These tests shall be carried out in conjunction with appropriate AHTD personnel present.
2.24	M	Each WIM shall be certified prior to State Acceptance Testing.
2.25	M	A minimum sample size of 100 vehicles shall be used to verify that the WIM performance meets accuracy requirements. Tank trucks, livestock, car haulers, and those vehicles where suspension characteristics are determined to affect the scale performance will not be required as part of the sample of trucks. Trucks with speeds varying by more than 10% will also not be required as part of the sample.
2.26	M	WIMs shall be warranted for a minimum of 5 years against defects in materials or workmanship.
2.27	M	All test points necessary to diagnose the equipment while in operation shall be easily accessible to technicians.

A.4.3 CCTV Camera

Exhibit A.4.3. CCTV Camera Requirements

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
3.1	M	<p>The system shall include a video imaging system to capture images of vehicles for identification purposes. The imaging system shall include a camera capable of producing discernible truck images in all lighting conditions. Full color images are preferred but monochrome images in low light conditions are acceptable. A minimum of 540 lines of vertical resolution is required. The camera shall be positioned to capture overview images of vehicles in each inbound mainline lane.</p> <p>Instructions to Proposer: In response to this requirement, Proposer shall also provide the imaging system manufacturer's name and the model information, including specifications for the camera(s) that will be used.</p>
3.2	M	<p>Images for vehicles classified as commercial vehicles by the WIM system shall be collated with the appropriate WIM data and provided in a timely manner to each system requesting commercial vehicle images.</p>

A.4.4 Vehicle Tracking Loops

Exhibit A.4.4 Vehicle Tracking Subsystem

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
4.1	M	<p>The system shall include a subsystem to track commercial vehicles on all mainline lanes and determine if each commercial vehicle entered the weigh station or remained on the mainline. Vehicle detectors shall have sufficient capabilities to meet the performance and maintenance requirements specified herein. In-road loops are preferred, but laser based detection systems will be considered, if feasible for a particular application/location, and meet the specifications herein.</p>
4.2	M	<p>The vehicle tracking subsystem shall provide timely information to the State mainline screening systems as requested by these systems.</p>

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
4.3	M	<p>The vehicle tracking subsystem shall provide sufficient and on-time delivery of information to the ramp screening system for the ramp screening system to:</p> <ul style="list-style-type: none"> • Match mainline WIM readings with ramp WIM readings for each commercial vehicle exiting the mainline onto the weigh station ramp; • Allow the ramp screening system to generate sorting decisions; • And allow the ramp screening system to display the information to officers prior to the vehicle approaching the manually operated weigh station stop/bypass signs. <p>AHTD and the ramp screening system Vendor have determined there is sufficient distance between the ramp WIMs and the weigh station for these requirements to be met, however, vehicle detection on the ramp would need to be prior to or in the proximity of the ramp WIM, and transmission of data to the ramp screening system would need to be performed immediately upon vehicle detection.</p>
4.4	M	<p>The delivered system shall be responsible for correctly collating vehicle tracking information, mainline WIM data, and mainline CCTV camera images and delivering collated information to each mainline and ramp screening system operating at the Arkansas weigh station system installation sites. If subsets of information are to be delivered as each subset is detected by the system, a reference number must be transmitted with all subsets of data that may be used by the receiving system to tie all information together for each commercial vehicle.</p>
4.5	M	<p>Each in-road installed loop shall have adequate surge suppression for protection from lightning strikes.</p>
4.6	M	<p>If laser devices are used for detecting vehicle class or tracking, the installation must be pre-approved by the Arkansas State Engineer.</p>
4.7	M	<p>Laser functionality shall not be degraded by snow, rain, dust and fog.</p>
4.8	M	<p>The vehicle tracking subsystem shall provide alerts to the ramp screening system for any vehicle that is traveling on the mainline or ramp in the wrong direction.</p>
4.9	M	<p>The vehicle tracking subsystem shall provide an accuracy of at least 98%.</p>
4.10	M	<p>The vehicle tracking subsystem shall have an availability of at least 99.5%.</p>

A.4.5 Interfaces

Exhibit A.4.5. Interfaces

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
5.1	M	<p>The system shall interface with mainline and ramp screening systems used at the weigh station installation sites as specified herein.</p> <p><i>Note: During proposal evaluation, Proposers with prior experience interfacing with the mainline and ramp screening systems used at the Arkansas weigh station installation sites and capable of using pre-proven interfaces with these screening systems shall be preferred.</i></p> <p>Instructions to Proposer: In response to this requirement, Proposer shall also provide specifics of any past interface activities with the mainline and ramp screening systems currently being used at the Arkansas weigh station installation sites. Specifics shall include information on state or country where the interface was implemented, data transmitted, the system(s) receiving the information, if the specifications of the interface meets Arkansas requirements, and if not, what changes are required. Proposers shall also specify if the interface specifications may be used as a basis for interfacing with Arkansas screening systems and meet the open interface requirements specified in this RFP.</p>

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
5.2	M	<p>The system shall provide an open interface for transmission of WIM data, CCTV image, and vehicle tracking results.</p> <ul style="list-style-type: none"> • The interface shall push available data, in a timely fashion, to each third party system requiring use of the data. These third party systems currently include PrePass, Drivewyze, and the IRD Ramp Sorting System for each weigh station. • The interface specifications shall include documentation of data package structure, data element definitions, types and sizes to facilitate third party consumption and use of the data. • The selected Vendor shall grant to AHTD the right to disseminate the interface documentation to future third party users of the data. • The selected Vendor shall not limit the number of third party users of the system data, nor shall the selected Vendor exclude any third-party vendor from use of any data available in the interface. <p>Instructions to Proposers: Proposers shall provide a positive statement agreeing to each requirement listed above. Exceptions to the above conditions may be noted in the proposal, however, AHTD may disqualify proposals with significant exceptions from the above requirement.</p>

A.4.6 Communications

Exhibit A.4.6. Communications

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
6.1	M	All communications required to support the mainline WIMs, vehicle tracking system, and CCTV cameras and collation of data shall be provided by the selected Proposer.

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
6.2	M	<p>All communications required to push mainline WIM, CCTV and vehicle tracking system data to 3rd party screening systems shall be provided by the selected Proposer.</p> <p>Instructions to Proposers: In response to this requirement, Proposers shall provide a list of proposed communications to support each interface with electronic screening systems. If communications proposed differ for the Bridgeport and Riverside installations (possibly due to the Riverside mainline WIM installation on the elevated portion of the highway), Proposers shall list communications for each site separately. Proposers shall also note in their proposals if the communications proposed have been used by their firm in prior interfaces with the screening system.</p>
6.3	M	All installed communications must provide sufficient bandwidth to fulfill requirements of this RFP and allow full-time maximum vehicle traffic through the weigh station. Bandwidth availability must account for a 5% annual growth in traffic over the development and maintenance period of any resulting contract and growth costs shall be included in the Proposer's bid.
6.4	M	Wireless communications shall comply with all Federal Communications Commission (FCC) Regulations.
6.5	M	All communications conduit and inner duct shall be dedicated to communications only.
6.6	M	Communications monitoring software shall be installed to provide feedback on communication reliability, timeliness, and to report errors. Communication network component failure notices shall be reported to a display device in the weigh station. Additional audible alarms for network component failure shall be configurable in the system.
6.7	M	Communication availability shall be 99.99%.
6.8	M	Communicated messages shall be uncorrupted and reach their intended destination in a timely manner with 99.999% reliability.
6.9	M	Mean Time Between Failure (MTBF) of all installed communications equipment shall be a minimum of 35,000 hours.
6.10	M	All communications installed shall not be adversely affected by climate conditions encountered at the installed locations.

A.4.7 Reporting Subsystem

Exhibit A.4.7. Reporting Subsystem

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
7.1	M	The delivered system shall provide reporting on network availability, timeliness and reliability, comparing actual values to values required by this RFP.
7.2	M	The delivered system shall provide reporting on system component downtime.
7.3	O	The system shall provide a statistical reporting module to support AHP enforcement activities. The module shall meet the requirements as specified below.
7.3.1	O	Depending on user permissions, the system shall allow the user to generate reports for one installation site, or to combine data from several selected installation sites.
7.3.2	O	The system shall allow the user to select report format and display options. Format and display options shall include display on the screen, output to a comma delimited file for import into Microsoft Excel, Adobe PDF, output to a text file, or output to an HTML file.
7.3.3	O	The system shall allow end users to generate routine reports by using a reporting interface geared to the end user. The reporting interface shall not require the end user to have knowledge of the internal database structure or database query language.
7.3.4	O	The system shall allow the scheduling of periodic reports and the delivery of reports to users through email.
7.3.5	O	The system shall provide reporting on the percentage of vehicles remaining on the mainline and the percentage of vehicles remaining on the mainline that were not weight compliant. User may specify the start and end time for the specified report.
7.3.6	O	The system shall provide reporting on the number of vehicles not enrolled in Drivewyze or PrePass that remained on the mainline, over a user specified period of time.
7.3.7	O	The system shall provide reporting on the number of vehicles enrolled in PrePass that were not weight compliant that remained on the mainline, over a user specified period of time.
7.3.8	O	The system shall provide reporting on the number of vehicles enrolled in Drivewyze that were not weight compliant that remained on the mainline.

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
7.3.9	O	Vehicle Weight Reports: The system shall provide a report that lists the number of vehicles in each weight class that passed through the site over a user specified period of time. Also reports shall be available listing the number of vehicles with axle configurations/weights that are not compliant with Arkansas regulations.
7.3.10	O	Provide ad-hoc reporting software that is able to generate additional reports needed by AHTD.

A.4.8 System Access, Security, and Data Storage

Exhibit A.4.8. System Access, Security and Data Storage

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
8.1	M	All user interface access to data and system functions of the delivered system shall be governed by login credentials and user group permissions that may be established by one or more AHTD system administrators. System access shall be controlled by Active Directory. Access rules for groups should be editable as needs may change over time.
8.2	M	Access to the system will be locked (for a specified period of time) for a specific account, when the attempts to sign on exceed a specified number.
8.3	M	Any data transfers between systems and/or devices that occur over the Internet shall be secured.
8.4	M	Data required to support mandatory reporting requirements shall be stored for 1 year.
8.5	O	Data required to support optional reporting requirements shall be stored for 3 years.

A.4.9 Warrantees and Maintenance

Exhibit A.4.9. Warrantees and Maintenance

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
9.1	M	<p>The maintenance agreement shall include preventative maintenance activities and periodic system testing, training, tuning, and calibration of systems to assure the system continues to meet the performance requirements as detailed herein.</p> <p>Instructions to Proposer: In response to this requirement, Proposers shall also provide the proposed schedule of preventative maintenance activities and periodic system testing, training, tuning and calibration activities.</p>
9.2	M	<p>The delivered system shall be composed of modular replaceable and repairable components to allow for efficient repair and minimal impact to traffic.</p>
9.3	M	<p>WIMs found to be outside error rates specified in the current version of ASTM 1318 Type III shall be corrected within 48 hours. For any other failures of the system, the Mean Time To Repair (MTTR) shall not exceed 8 hours.</p>
9.4	M	<p>System availability shall be 99.5% or better.</p>
9.5	M	<p>Problem Reporting: The selected Vendor shall provide a toll-free number for problem reporting, and shall respond, providing a test/repair plan within 2 hours after the problem report.</p>
9.6	M	<p>The selected Vendor must agree to place the source code for the software and any upgrades supplied in escrow with a third party acceptable to the agency and to enter into a customary source code escrow agreement which includes a provision that entitles the agency to receive everything held in escrow in the event the selected Vendor ceases to offer maintenance of the system for any reason.</p>

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
9.7	M	<p>The selected Vendor shall warrant and represent that all products and deliverables furnished by or through the Vendor shall perform as intended, and shall be substantially uninterrupted and error-free in operation and guaranteed against faulty material and workmanship for a warranty period of a minimum of ninety (90) days from the date of acceptance or the maximum allowed by the manufacturer, unless specifically noted otherwise in this RFP. During the warranty period, defects in the products or deliverables specified and furnished by or through the Vendor shall be repaired or replaced by the Vendor at no cost or expense to AHTD.</p> <p>Instructions to Proposer: In response to this requirement, Proposers shall also provide a statement of warranty, complying with this requirement and other warranty requirements in this RFP, and shall also list any products and deliverables with warranties that exceed ninety (90) days, and the length and conditions of the warranties.</p>

A.4.10 Installation, Environmental, and Security Requirements

Exhibit A.4.10. Installation, Environmental, and Security Requirements

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
10.1	M	<p>The selected Vendor will provide all poles, overhead arms, concrete/asphalt work, vehicle detector loop installation, conduit and electrical line installation, communications installation, cabinets, electrical grounding equipment and installation, and any other equipment, installation or construction services necessary to install the delivered system at the site(s).</p> <p>Instructions to Proposer: In response to this requirement, Proposers shall also detail all proposed installation and construction services to be provided for the Bridgeport and Riverside installations. In addition, Proposers will provide a draft <i>Site Diagram</i> for the Bridgeport and Riverside weigh stations. The proposed Site Diagram will provide the approximate and/or relative location of all equipment to be installed, including cables and conduit, installation poles, electrical power, vehicle detection loops, system controllers, and all other equipment to be installed to implement the proposed system. The selected Vendor's site diagram will be modified, as needed, and finalized during the Design Task for the project as described in Exhibit 2-1.</p>
10.2	M	All cables shall be in conduit unless specifically approved by the AHTD engineer.
10.3	M	All materials and services shall comply with the current version of the <i>Arkansas Standard Specification for Highway Construction</i> . (http://www.arkansashighways.com/standard_specifications.aspx) Materials and services shall also comply with all Federal, State, and Local Codes.
10.4	M	Duct seal shall be used to seal all conduits in any installed cabinets and in junction boxes.
10.5	M	All conduits shall have a polyethylene pull string with a minimum 210 lb. break strength left in place at the completion of construction.
10.6	M	Separate conduit shall be used for AC/DC power and low voltage signal cables.
10.7	M	All exposed roadside equipment must be constructed to prevent internal water damage and the exteriors shall be fabricated from corrosion and rust resistant materials, or properly plated to achieve corrosion and rust resistance. If the proposed system includes a roadside cabinet, the cabinet must be constructed of non-corrosive material and reasonably secured against tampering and vandalism.

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
10.8	M	Material used in the construction and installation of the system must be of sufficient quality for the purposes intended and must be suited for the wind, snow and/or ice loads encountered at the location.
10.9	M	The installed equipment shall be constructed of standard materials to assure prompt and continued delivery of spare parts for future system repair.
10.10	M	<p>All installed systems and equipment shall be properly grounded and shall be protected against over current, surges, over voltage, under voltage, and lightning.</p> <p>Instructions to Proposer: In response to this requirement, Proposers shall also detail all proposed electrical protection devices, the approximate location for each, and the equipment protected. This information may be added to the Site Diagram provided to fulfill information requirements for 10.1 or provided in list form.</p>
10.11	M	All equipment shall be reasonably protected from electromagnetic interference.
10.12	M	All computers and controllers shall be provided with backup power units (UPS) in case of power outages. Each UPS shall provide a minimum of 15 minutes backup power.
10.13	M	All wiring and communication cabling shall be clearly labeled and Underwriters Laboratory (UL) labels shall be used for any electrical panel board enclosures and accessories.
10.14	M	All installation and construction services will comply with the safety requirements set forth by AHTD.
10.15	M	Any installed system components that are exposed to climactic conditions shall be capable of performing within the range of temperatures, precipitation, winds, humidity and all other climate conditions encountered in Arkansas. In addition, equipment shall be capable of performing under roadside conditions where vehicle exhaust, and roadway dirt and rainwater, snow and ice may come in contact with the components.

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
10.16	M	<p>Any ramp closures, weigh station closures, or lane closures required for installation activities shall be subject to prior approval of AHTD and will be restricted as to time of day. In the West Memphis area, lane closures may only occur from 8:00 PM to 8:00AM.</p> <p>If the performance of Optional Requirement 10.20 is not included in the Scope of Work Proposal for the selected Vendor, the selected Vendor will be required to coordinate lane closures and work with AHTD to allow AHTD to perform the task listed in Requirement 10.20.</p>
10.17	M	The selected Vendor shall be responsible for resolution of all installation issues, including issues of incompleteness, workmanship, complete sealing of surfaces to prevent penetration of roadway grime and water, and the complete restoration of the site after construction / installation activities are completed.
10.18	M	<p>Installed equipment, systems, communications, and materials shall be of a quality to result in an above average Mean Time Between Failure (MTBF).</p> <p>Instructions to Proposer: In response to this requirement, Proposers shall also provide a table that lists the predicted MTBF for all equipment, systems, communications, and materials that will be provided. Equipment, system, communication and material categories may be used instead of listing each component.</p>
10.19	M	Roadside cabinets on elevated portions of the highway shall be installed on supports and installed in a manner and location as to not impede roadway traffic.
10.20	O	Overhead hung lighting and light mounting brackets on the sign support, shown in Exhibit A-1, shall be removed. AHTD has determined the lighting is in disrepair and requires removal.

A.4.11 Testing and Training

Exhibit A.4.11 Testing, Training, and System Go-live Support

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
11.1	M	Prior to installation of any system component, the component shall be subjected to factory testing and shall successfully complete all tests.

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
11.2	M	<p>Pre-installation Testing: System software components and interfaces shall be subjected to and shall successfully complete unit, integration and system testing of delivered components prior to installation in Arkansas. Integration testing and system testing should be conducted using a simulated installation environment, and testing shall be conducted in the simulated environment to the extent practicable. Also, where practical the pre-installation testing shall include preliminary testing of the interfaces with Arkansas' mainline and ramp screening systems. The selected Vendor is responsible for defining all tests scripts and conducting all tests.</p> <p>Instructions to Proposer: In response to this requirement, Proposers shall also provide a description of unit, integration and system testing that will be conducted.</p>
11.3	M	<p>Site Testing: After installation of each subsystem, the subsystem testing shall be conducted. Interface testing shall be conducted between delivered subsystems as subsystems are installed. Site testing shall be conducted after complete system installation. The selected Vendor is responsible for defining all test scripts and conducting all tests.</p> <p>Instructions to Proposer: In response to this requirement, Proposers shall also provide a description of site tests that will be conducted.</p>
11.4	M	<p>On site system training / calibration / tuning / configuration shall be conducted to ensure optimal performance of communications, WIMs, CCTVs, the vehicle tracking subsystem, and all other delivered components. The selected Vendor is responsible for defining all test scripts and conducting all tests, system training, calibration, tuning and configuration required.</p> <p>Instructions to Proposer: In response to this requirement, Proposers shall also provide a description of system training, calibration, tuning and configuration activities anticipated.</p>
11.5	M	<p>Integration with Screening Systems: After installation and testing of delivered components, interface testing with mainline and ramp screening systems shall be conducted. The selected Vendor is responsible for defining all test scripts after consultation with and agreement of screening system vendors and conducting all tests in cooperation with screening system vendors.</p>

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
11.6	M	Full System Testing: After integration with screening system testing is completed, full system and integration testing shall be conducted. Testing shall include limited operational tests requiring the function and cooperation of all system components. The selected Vendor is responsible for defining all tests in coordination with AHTD and 3 rd party screening system vendors.
11.7	M	<p>Training shall be conducted for system users and administrators and shall be conducted, in person, at weigh stations. Training shall be provided for each shift at each installation site.</p> <p>Instructions to Proposer: In response to this requirement, Proposers shall also provide a description and duration of the user training that will be conducted.</p>
11.8	M	AHTD acceptance testing shall be conducted after all other tests have been completed. The selected Vendor is responsible for developing test scripts and assisting AHTD as needed to conduct the tests. At AHTDs option, AHTD may perform additional acceptance testing beyond the test scripts developed by the selected Vendor.
11.9	M	Any remedial work required to any system component, including remedial work required due to results of Acceptance Testing, shall be performed as part of the scope of this contract and no additional costs to AHTD shall be incurred.
11.10	M	The Vendor shall provide support for a five (5) month AHTD operational test of the system. Support shall include informational support and additional Vendor supplied reports. Support shall not exceed 40 hours total (divided between the Bridgeport and Riverside installation site) during the 5 month period and shall be provided under the first year of annual maintenance.
11.11	M	The Vendor shall provide on-site support for the initial 3 days after Go-live.

A.4.12 Optional Integrations

Instructions to Proposers: *It is expected that not all Proposers will be able to provide any or all integrations listed as optional in the table below. Proposers with ownership of any 3rd party screening system listed below or Proposers partnering with firms holding ownership of any 3rd party systems, are asked to provide information on the complete integration of the WIM, CCTV, and vehicle tracking data with those systems. Proposals shall not be rejected by AHTD if no optional integrations are offered. Proposers not offering any optional integrations are encouraged to submit proposals.*

Also, the requirements listed below are minimally descriptive. Proposers responding to any of the requirements listed in this Exhibit may expand on functionality that would be available with further integration, however, pricing of expanded capabilities should be listed separately in the Cost Proposal.

Exhibit A.4.12 Optional Integrations.

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
12.1	O	<p>Integrate the ramp screening system (developed by International Road Dynamics (IRD), Inc.) with the mainline WIM, CCTV, and vehicle tracking system data. Results of the integration shall include:</p> <ul style="list-style-type: none"> • A display that lists the commercial vehicles that have remained on the mainline, the CCTV image for each vehicle, and the mainline WIM data. • A display that lists the commercial vehicles exiting the mainline onto the ramp, in correct sequence, and correlation of mainline CCTV and WIM data with the data available from the ramp screening system.
12.2	O	<p>Integrate the PrePass screening system (HELP, Inc.) with the mainline WIM, vehicle tracking, and CCTV data. Results of the integration shall include:</p> <ul style="list-style-type: none"> • Provide a display that includes the CCTV image and WIM data for each PrePass enrolled truck, along with existing PrePass screening data already provided to the weigh stations. • Provide a compliance display, indicating vehicles out of compliance with AHTD requirements that were instructed to enter the weigh station but remained on the mainline. Provide CCTV and weight data.

Requirement Number	Optional(O) or Mandatory(M)	Requirement Description
12.3	O	Integrate the Drivewyze screening system (Intelligent Imaging Systems, Inc.) with the mainline WIM, vehicle tracking and CCTV data. Results of the integration shall include: <ul style="list-style-type: none"> • Provide a display that includes the CCTV image and WIM data for each Drivewyze enrolled truck, along with existing Drivewyze screening data already provided to the weigh stations. • Provide a compliance display indicating vehicles out of compliance with AHTD requirements that were instructed to enter the weigh station but remained on the mainline.
12.4	O	Provide a compliance display that provides CCTV images and weight data for all vehicles not enrolled in either PrePass or Drivewyze that remained on the mainline.

A.5 Possible Future Enhancements

AHTD may request an expansion of the capabilities of the system in the future as additional technologies, data, and system interfaces become available. Possible future enhancements may include, but are not limited to:

- Interfacing with installed OCR based screening systems, both on the mainline and ramp.
- Installation at additional sites.

The above list of possible future enhancements is informational only and Proposers are not required to provide a response to any item in the list in Section 2 of their proposal. However, should Proposers wish to include information on how the proposed system may accommodate any future enhancement, or any work in progress occurring in other jurisdictions related to any item above, proposers are requested to provide this information in Section 6 of their proposals.

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

NOTICE OF NONDISCRIMINATION

The Arkansas State Highway and Transportation (Department) complies with all civil rights provisions of federal statutes and related authorities that prohibit discrimination in programs and activities receiving federal financial assistance. Therefore the Department does not discriminate on the basis of race, sex, color, age, national origin, religion or disability, in the admission, access to and treatment in the Department's programs and activities, as well as the Department's hiring or employment practices. Complaints of alleged discrimination and inquiries regarding the Department's nondiscrimination policies may be directed to Joanna P. McFadden, Section Head - EEO/DBE (ADA/504/Title VI Coordinator), P. O. Box 2261, Little Rock, AR 72203, (501) 569-2298, (Voice/TTY 711), or the following email address: Joanna.Mcfadden@arkansashighways.com.

Free language assistance for Limited English Proficient individuals is available upon request.

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